

Patent Claims

1. A printed circuit board with
 - at least one contact element for connecting a mating contact, where the contact element is secured to the circuit board, and
 - a plastic layer, which is applied to at least one side of the circuit board,
 - where the contact element runs from the circuit board through the plastic layer and projects from this plastic layer to connect the mating contact.
2. A printed circuit board according to claim 1, in which the plastic layer is applied to one or both sides of the circuit board.
3. A printed circuit board according to claim 1, in which the plastic layer is a thermoplastic material with a melting point between 250° C and 450° C, preferably between 350° C and 410° C.
4. A printed circuit board according to claim 3, in which the plastic layer is thermoplastic material with a melting point between 350° C and 410° C.
5. A printed circuit board according to claim 1, in which the contact element is soldered onto the circuit board.
6. A printed circuit board according to claim 1, in which the contact element is soldered to the circuit board with a high-temperature solder having a melting temperature greater than 200° C, particularly greater than 230° C.
7. A printed circuit board according to claim 3, in which the contact element is soldered to the circuit board with a high-temperature solder having a melting temperature greater than 200° C, particularly greater than 230° C.

8. A printed circuit board according to claim 1, in which the circuit board is made of a material having a thermal strength greater than 100° C, particularly greater than 150° C.
9. A printed circuit board according to claim 1, in which the circuit board consists of an epoxide fiberglass laminate with an interlaced resin system.
10. A printed circuit board according to claim 1, in which at least one conductor is positioned on the surface of the circuit board and the plastic layer covers the conductor and an adjacent surface area of the circuit board.
11. A printed circuit board according to claim 7, in which at least one conductor is positioned on the surface of the circuit board and the plastic layer covers the conductor and an adjacent surface area of the circuit board.
12. A printed circuit board according to claim 1, in which the circuit board exhibits a through-passage to which the contact element is soldered, and in which circuit board the plastic layer is applied to the two opposite surfaces of the circuit board in the area of the through-passage.
13. A printed circuit board according to claim 11, in which the circuit board exhibits a through-passage to which the contact element is soldered, and in which circuit board the plastic layer is applied to the two opposite surfaces of the circuit board in the area of the through-passage.
14. A printed circuit board according to claim 1,
 - in which the plastic layer is applied to one or both sides of the circuit board,
 - in which the plastic layer is a thermoplastic material with a melting point greater than 80° C, particularly greater than 350° C,
 - in which the contact element is soldered to the circuit board
 - in which the circuit board consists of an epoxide fiberglass laminate with an interlaced resin system, and

- in which at least one conductor is positioned on the surface of the circuit board and the plastic layer covers the conductor and an adjacent surface area of the circuit board.

15. A plastic injected part with

- a printed circuit board that exhibits at least one contact element for connecting a mating contact, where the contact element is secured to the circuit board, and
- a plastic layer, which is applied to at least one side of the circuit board,
- where the contact element runs from the circuit board through the plastic layer and projects from this plastic layer to connect the mating contact.

16. A plastic injected part according to claim 15, in which the plastic extends from the plastic layer outward and laterally as the housing wall of a housing, and the plastic layer and the housing wall are produced from the same material.

17. A plastic injected part according to claim 15, in which

- the plastic layer is applied to one or both sides of the circuit board,
- in which the plastic layer is a thermoplastic material with a melting point greater than 80° C, particularly greater than 350° C,
- in which the contact element is soldered to the circuit board,
- in which the circuit board consists of an epoxide fiberglass laminate with an interlaced resin system, and
- in which at least one conductor is positioned on the surface of the circuit board and the plastic layer covers the conductor and an adjacent surface area of the circuit board.

18. A process for at least partial coating with plastic of a printed circuit board which exhibits at least one contact element, where in the process

- the contact element is soldered onto the circuit board, and thereupon
- the circuit board is coated with the plastic in such a way that the contact element runs from the circuit board through the plastic and projects from the plastic in order to connect a mating contact.

19. A process according to claim 18, in which the contact element is soldered into a through-passage in the circuit board, and the plastic is simultaneously sprayed as a plastic layer onto the two opposite surfaces of the circuit board in the vicinity of the through-passage.

20. A process according to claim 18, in which

- the plastic used is a thermoplastic material with a melting temperature greater than 80° C, particularly higher than 100° C, and particularly higher than 350° C,
- a high-temperature solder with a melting temperature greater than 200° C, particularly greater than 235° C, is used for soldering the contact element, and
- a circuit board is used whose material has a thermal stability greater than 150° C.